

Full Report (All Nutrients) 11233, Kale, raw

Report Date: December 05, 2014 03:17 EST

Nutrient values and weights are for edible portion

Food Group : Vegetables and Vegetable Products

Carbohydrate Factor: 3.57 Fat Factor: 8.37 Protein Factor: 2.44 Nitrogen to Protein Conversion Factor: 6.25

Refuse: 28% Refuse Description: Stem ends, tough stems and tough midrib parts

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1.0 cup 1" pieces, loosely packed 16g
Proximates					
Water 1	g	84.04	6	0.443	13.45
Energy	kcal	49	--	--	8
Energy	kJ	207	--	--	33
Protein 1	g	4.28	2	--	0.68
Total lipid (fat) 1	g	0.93	2	--	0.15
Ash 1	g	2.01	1	--	0.32
Carbohydrate, by difference	g	8.75	--	--	1.40
Fiber, total dietary	g	3.6	--	--	0.6
Sugars, total	g	2.26	--	--	0.36
Minerals					
Calcium, Ca 1	mg	150	2	--	24
Iron, Fe 1	mg	1.47	2	--	0.24
Magnesium, Mg 1	mg	47	2	--	8
Phosphorus, P 1	mg	92	2	--	15
Potassium, K 1	mg	491	6	16.414	79
Sodium, Na 1	mg	38	6	11.413	6
Zinc, Zn 1	mg	0.56	2	--	0.09
Copper, Cu 1	mg	1.499	2	--	0.240
Manganese, Mn 1	mg	0.659	1	--	0.105
Selenium, Se	µg	0.9	--	--	0.1

Vitamins

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1.0 cup 1" pieces, loosely packed 16g
Vitamin C, total ascorbic acid	mg	120.0	1	--	19.2
Thiamin	mg	0.110	1	--	0.018
Riboflavin	mg	0.130	1	--	0.021
Niacin	mg	1.000	1	--	0.160
Pantothenic acid	mg	0.091	--	--	0.015
Vitamin B-6	mg	0.271	1	--	0.043
Folate, total 1	µg	141	1	--	23
Folic acid	µg	0	--	--	0
Folate, food 1	µg	141	1	--	23
Folate, DFE	µg	141	--	--	23
Choline, total	mg	0.8	--	--	0.1
Vitamin B-12	µg	0.00	--	--	0.00
Vitamin A, RAE	µg	500	--	--	80
Retinol	µg	0	--	--	0
Carotene, beta 1 2 3	µg	5927	4	1215.090	948
Carotene, alpha 1	µg	54	1	--	9
Cryptoxanthin, beta 1	µg	81	1	--	13
Vitamin A, IU	IU	9990	--	--	1598
Lycopene 1	µg	0	1	--	0
Lutein + zeaxanthin 1	µg	8198	1	--	1312
Vitamin E (alpha-tocopherol)	mg	1.54	--	--	0.25
Vitamin D (D2 + D3)	µg	0.0	--	--	0.0
Vitamin D	IU	0	--	--	0
Vitamin K (phylloquinone) 1	µg	704.8	1	--	112.8
Lipids					
Fatty acids, total saturated	g	0.091	--	--	0.015
4:0	g	0.000	--	--	0.000
6:0	g	0.000	--	--	0.000
8:0	g	0.000	--	--	0.000
10:0	g	0.000	--	--	0.000
12:0	g	0.002	--	--	0.000
14:0	g	0.003	--	--	0.000
16:0	g	0.076	--	--	0.012

Nutrient	Unit	1 Value Per100 g	Data points	Std. Error	1.0 cup 1" pieces, loosely packed 16g
18:0	g	0.004	--	--	0.001
Fatty acids, total monounsaturated	g	0.052	--	--	0.008
16:1 undifferentiated	g	0.001	--	--	0.000
18:1 undifferentiated	g	0.049	--	--	0.008
20:1	g	0.000	--	--	0.000
22:1 undifferentiated	g	0.000	--	--	0.000
Fatty acids, total polyunsaturated	g	0.338	--	--	0.054
18:2 undifferentiated	g	0.138	--	--	0.022
18:3 undifferentiated	g	0.180	--	--	0.029
18:4	g	0.000	--	--	0.000
20:4 undifferentiated	g	0.002	--	--	0.000
20:5 n-3 (EPA)	g	0.000	--	--	0.000
22:5 n-3 (DPA)	g	0.000	--	--	0.000
22:6 n-3 (DHA)	g	0.000	--	--	0.000
Cholesterol	mg	0	--	--	0
Other					
Alcohol, ethyl	g	0.0	--	--	0.0
Caffeine	mg	0	--	--	0
Theobromine	mg	0	--	--	0
Flavonoids					
Flavones					
Apigenin 4 5 6	mg	0.0	4	0	0.0
Luteolin 4 6	mg	0.0	2	--	0.0
Flavonols					
Isorhamnetin 7	mg	23.6	3	0	3.8
Kaempferol 4 5 6 7 8 9 10	mg	46.8	18	5.56	7.5
Myricetin 4 6	mg	0.0	2	--	0.0
Quercetin 4 5 6 7 8 9 10	mg	22.6	18	2.94	3.6
Isoflavones					
Daidzein 11	mg	0.0	1	--	0.0
Genistein 11	mg	0.0	1	--	0.0
Total isoflavones 11	mg	0.0	1	--	0.0

Sources of Data

¹Nutrient Data Laboratory, ARS, USDA National Food and Nutrient Analysis Program Wave 10j, 2006 Beltsville MD

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⁵Huber, L. S., Hoffman-Ribani, R., and Rodriguez-Amaya, D. B. **Quantitative variation in Brazilian vegetable sources of flavonols and flavones.**, 2009 Food Chemistry 113 pp.1278-1282

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⁸Bilyk, A., and Sapers, G. M. **Distribution of quercetin and kaempferol in lettuce, kale, chive, garlic chive, leek, horseradish, red radish, and red cabbage tissues.**, 1985 J. Agric. Food Chem. 33 pp.226-228

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¹⁰Olsen, H., Aaby, K., and Borge, G. I. **Characterization and quantification of flavonoids and hydroxycinnamic acids in cultry kale (Brassica oleracea L. convar. Acephala var. sabellica) by HPLC-DAD-ESI-MS.**, 2009 J. Agric. Food Chem. 57 pp.2816-2825

¹¹Horn-Ross, P. L., Barnes, S., Lee, M., Coward, L., Mandel, E., Koo, J., John, E. M., and Smith, M. **Assesing phytoestrogen exposure in epidemiologic studies: development of a database (United States).**, 2000 Cancer Causes and Control 11 pp.289-298

Langual Code(s)

- A0152 VEGETABLE OR VEGETABLE PRODUCT (US CFR)
- A1281 1100 VEGETABLES AND VEGETABLE PRODUCTS (USDA SR)
- B1281 KALE
- C0200 LEAF
- E0150 WHOLE, NATURAL SHAPE
- F0003 NOT HEAT-TREATED
- G0003 COOKING METHOD NOT APPLICABLE
- H0003 NO TREATMENT APPLIED
- J0001 PRESERVATION METHOD NOT KNOWN
- K0003 NO PACKING MEDIUM USED
- M0001 CONTAINER OR WRAPPING NOT KNOWN
- N0001 FOOD CONTACT SURFACE NOT KNOWN
- P0024 HUMAN FOOD, NO AGE SPECIFICATION